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**SPACE, PLACE AND ATMOSPHERE.  
EMOTION AND PERIPHERAL PERCEPTION  
IN ARCHITECTURAL EXPERIENCE**

The richest experiences happen long before the soul takes notice.  
And when we begin to open our eyes to the visible,  
we have already been supporters of the invisible for a long time.<sup>1</sup>  
Gabriele D'Annunzio

**Fusion of the world and the mind**

The quality of a space or place is not merely a visual perceptual quality as it is usually assumed. The judgement of environmental character is a complex multi-sensory fusion of countless factors which are immediately and synthetically grasped as an overall atmosphere, ambience, feeling or mood. «I enter a building, see a room, and – in the fraction of a second – have this feeling about it», Peter Zumthor, one of the architects who have acknowledged the importance of architectural atmospheres, confesses<sup>2</sup>. John Dewey, the visionary American philosopher (1859-1952), who already eight decades ago grasped the immediate, embodied, emotive, and subconscious essence of experience, articulates the nature of this existential encounter followingly:

the total overwhelming impression comes first, perhaps in a seizure by a sudden glory of the landscape, or by the effect upon us of entrance into a cathedral when dim light, incense, stained glass and majestic proportions fuse in one indistinguishable whole. We say with truth that a painting strikes us. There is an impact that precedes all definite recognition of what it is about.<sup>3</sup>

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<sup>1</sup> G. D'Annunzio, *Contemplazioni della morte*, Milano, Fratelli Treves, 1912, pp. 17-18. As quoted in G. Bachelard, *Water and dreams: an essay on the imagination of matter*, Dallas, The Pegasus Foundation, 1983, p. 16.

<sup>2</sup> P. Zumthor, *Atmospheres – Architectural environments – Surrounding objects*, Basel – Boston – Berlin, Birkhäuser, 2006, p. 13.

<sup>3</sup> J. Dewey, *Art as experience*, 1934 (1987), as quoted in M. Johnson, *The meaning of the body: aesthetics of human understanding*, Chicago – London, The University of Chicago Press, 2007, p. 75.

This experience is multi-sensory in its very essence. In his book *The experience of place*, Tony Hiss uses the notion «simultaneous perception – the system we use to experience our surroundings»<sup>4</sup>. This is, however, also the way we normally observe, with all the senses at once. As Merleau-Ponty notes: «My perception is [...] not a sum of visual, tactile, and audible givens. I perceive in a total way with my whole being: I grasp a unique structure of the thing, a unique way of being, which speaks to all my senses at once»<sup>5</sup>. An atmospheric perception also involves judgements beyond the five Aristotelian senses, such as sensations of orientation, gravity, balance, stability, motion, duration, continuity, scale and illumination. Indeed, the immediate judgement of the character of space calls for our entire embodied and existential sense, and it is perceived in a diffuse, peripheral and unconscious manner rather than through precise, focused and conscious observation. This complex assessment also includes the dimension of time as experiencing implies duration and the experience fuses perception, memory and imagination. Moreover, each space and place is always an invitation to and suggestion of distinct acts: spaces and true architectural experiences are verbs.

In addition to environmental atmospheres, there are cultural, social, work place, family, etc. interpersonal atmospheres. The atmosphere of a social situation can be supportive or discouraging, liberating or stifling, inspiring or dull. We can even speak of specific atmospheres in the scale of cultural, regional or national entities. *Genius loci*, the Spirit of Place, is a similarly ephemeral, unfocused and non-material experiential character that is closely related with atmosphere; we can, indeed, speak of the atmosphere of a place, which gives it its unique perceptual character and identity. Dewey explains this unifying character as a specific quality:

An experience has a unity that gives it its name, *that* meal, *that* storm, *that* rapture of friendship. The existence of this unity is constituted by a single *quality* that pervades the entire experience in spite of the variation of its constituent parts. This unity is neither emotional, practical, nor intellectual, for these terms name distinctions that reflection can make within it.<sup>6</sup>

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<sup>4</sup> T. Hiss, *The experience of place*, New York, Random House, 1991.

<sup>5</sup> M. Merleau-Ponty, *The film and the new psychology*, in Id., *Sense and non-sense*, Evanston, Northwestern University Press, 1964, p. 48.

<sup>6</sup> J. Dewey, in M. Johnson, *op. cit.*, p. 74.

In another context the philosopher re-emphasizes the integrating power of this experiential quality: «The quality of the whole permeates, affects, and controls every detail»<sup>7</sup>.

Martin Heidegger links space indivisibly with the human condition: «When we speak of man and space, it sounds as though man stood on one side, space on the other. Yet space is not something that faces man. It is neither an external object nor an inner experience. It is not that there are men, and over and above them space»<sup>8</sup>. As we enter a space, the space enters us, and the experience is essentially an exchange and fusion of the object and the subject. Robert Pogue Harrison, an American literary scholar, states poetically: «In the fusion of place and soul, the soul is as much of a container of place as place is a container of soul, both are susceptible to the same forces of destruction»<sup>9</sup>. Atmosphere is similarly an exchange between material or existent properties of the place and the immaterial realm of human perception and imagination. Yet, they are not physical 'things' or facts, as they are human experiential 'creations'.

Paradoxically, we grasp the atmosphere before we identify its details or understand it intellectually. In fact, we may be completely unable to say anything meaningful about the characteristics of a situation, yet have a firm image, emotive attitude, and recall of it. In the same way, although we do not consciously analyse or understand the interaction of meteorological facts, we grasp the essence of weather at a glance, and it inevitably conditions our mood and intentionality. As we enter a new city, we grasp its overall character similarly, without having consciously analysed a single one of its countless material, geometric, or dimensional properties. Dewey even extends processes that advance from an initial but temporary grasp of the whole towards details all the way to the processes of thinking: «All thought in every subject begins with just such an unanalysed whole. When the subject matter is reasonably familiar, relevant distinctions speedily offer themselves, and sheer qualitiveness may not remain long enough to be readily recalled»<sup>10</sup>.

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<sup>7</sup> *Ibid.*, p. 73.

<sup>8</sup> M. Heidegger, *Building, dwelling, thinking*, in *Id.*, *Basic writings*, New York, Harper & Row, 1997, p. 334.

<sup>9</sup> R. Pogue Harrison, *Gardens: an essay on the human condition*, Chicago - London, The University of Chicago Press, 2008, p. 130.

<sup>10</sup> J. Dewey, *op. cit.*, p. 75.

This is an intuitive and emotive capacity that seems to be biologically derived and largely unconsciously and instinctively determined through evolutionary programming. «We perceive atmospheres through our emotional sensibility – a form of perception that works incredibly quickly, and which we humans evidently need to help us survive», Zumthor suggests<sup>11</sup>. The new sciences of bio-psychology and ecological psychology actually study such evolutionary causalities in human instinctual behaviour and cognition<sup>12</sup>. It is evident that we are genetically and culturally conditioned to seek or avoid certain types of situations or atmospheres. Our shared pleasure in being in the shadow of large trees looking onto a sun-lit open field, for instance, is explained on the basis of such evolutionary programming – this specific type of setting demonstrates the polar notions of ‘refuge’ and ‘prospect’, which have been applied to explain the pleasurable pre-reflective feel of Frank Lloyd Wright’s houses, for instance<sup>13</sup>.

Although atmosphere and mood seem to be overarching qualities of our environments and spaces, these qualities have not been much observed, analysed or theorized in architecture or planning. Professor Gernot Böhme is one of the pioneering thinkers in the philosophy of atmospheres, along with Herman Schmitz<sup>14</sup>. Recent philosophical studies, relying on neurological evidence, such as Mark Johnson’s *The meaning of the body: aesthetics of human understanding*<sup>15</sup>, and neurological surveys, such as Iain McGilchrist’ *The master and his emissary: the divided brain and the making of the Western world*<sup>16</sup>, significantly value the power of atmospheres. Current neurological findings on mirror neurons help to understand that we can internalise external physical situations and experiences through embodied simulation.

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<sup>11</sup> P. Zumthor, *op. cit.*, p. 13.

<sup>12</sup> See, for instance, G. Hildebrand, *The origins of architectural pleasure*, Berkeley - Los Angeles - London, University of California Press, 1999; Id., *The wright space: pattern & meaning in Frank Lloyd Wright’s houses*, Seattle, University of Washington Press, 1992.

<sup>13</sup> See E.O. Wilson, *The right place*, in Id., *Biophilia*, Cambridge, Harvard University Press, 1984, pp. 103-118.

<sup>14</sup> G. Böhme, *Atmosphäre*, Frankfurt a. M., Suhrkamp Verlag, 1995; Id., *Architektur und Atmosphäre*, München, Fink, 2006; H. Schmitz, *System der Philosophie*, Bd. III: *Der Raum*, 2, Teil: *Der Gefühlsraum*, Bonn, 1969.

<sup>15</sup> M. Johnson, *op. cit.*

<sup>16</sup> I. McGilchrist, *The master and his emissary: the divided brain and the making of the Western world*, New Haven - London, Yale University Press, 2009, p. 184.

### Atmospheres in the arts

Atmosphere seems to be a more conscious objective in literary, cinematic and theatrical thinking than in architecture. Even the imagery of a painting is integrated by an overall atmosphere or feeling; the most important unifying factor in paintings is usually their specific feel of illumination and colour, more than their conceptual or narrative content. In fact, there is an entire painterly approach, as exemplified by J.M.W. Turner and Claude Monet, which can be called 'atmospheric painting', in the two meanings of the notion; atmosphere being both the subject matter and the expressive means of these paintings. «Atmosphere is my style», Turner confessed to John Ruskin as Zumthor reminds us<sup>17</sup>. The formal and structural ingredients in the works of these artists are deliberately suppressed for the benefit of an embracing and shapeless atmosphere, suggestive of temperature, moisture and subtle movements of the air. 'Colour field' painters similarly suppress form and boundaries and utilize large size of the canvas to create an intense immersive interaction and presence of colour.

Great films, such as the films by Jean Vigo, Jean Renoir, Michelangelo Antonioni, and Andrei Tarkovsky, are also steeped in their characteristic atmospheric continuum. Also theater relies heavily on atmosphere which supports the integrity and continuity of the story regardless of the often abstracted and vaguely hinted features of the place or space. The ambience can be so suggestive and dominating that very few cues of the setting are needed, as in Lars von Trier's film *Dogville* (2003) in which houses and rooms are often indicated by mere chalk lines on the dark floor, but the drama takes a full grip of the spectator's imagination and emotions.

Somewhat paradoxically, we can also speak of 'atmospheric sculpture', such as the sketch-like modelled works of Medardo Rosso, Auguste Rodin and Alberto Giacometti. Often it is the atmosphere of the works, as the abstracted sculptures of Constantin Brancusi, that creates the unique sense of a singular artistic world. Artists seem to be more aware of the seminal role of ambience than architects, who tend to think more in terms of the 'pure' qualities of space, form and geometry. Among architects atmosphere seems to be judged as something romantic and shallowly entertaining. Besides, the serious Western architectural tradition is enti-

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<sup>17</sup> P. Zumthor, *op. cit.*, title page.

rely based on regarding architecture as a material and geometric object as experienced through focused vision. Standard architectural images seek clarity rather than ephemerality and obscurity.

When describing his creative process in the essay *The trout and the mountain stream*, Alvar Aalto confesses:

Led by my instincts I draw, not architectural syntheses, but sometimes even childish compositions, and via this route I eventually arrive at an abstract basis to the main concept, a kind of universal substance with whose help the numerous quarrelling sub-problems [of the design task] can be brought into harmony.<sup>18</sup>

Aalto's notion of universal substance seems to refer to a unifying atmosphere or intuitive feeling rather than any conceptual, intellectual or formal ideas.

Music of the various art forms is particularly atmospheric, and has a forceful impact on our emotions and moods regardless of how little or much we intellectually understand musical structures. That seems to be the very reason why muzak is commonly used to create desired atmospheric moods in public spaces, shopping malls and even elevators. Music creates atmospheric interior spaces, ephemeral and dynamic experiential fields, rather than distant shapes, structures or objects. Atmosphere emphasizes a sustained being in a situation rather than a singular moment of perception. The fact that music can move us to tears is a convincing proof of the emotive power of art as well as of our innate capacity to simulate and internalise abstract experiential structures, or more precisely, to project our emotions on abstractly symbolic structures.

### **Recognition of place and space**

The instant recognition of the inherent nature of a place is akin to the automatic reading of the creature-like identities and essences in the biological world. Animals instantly recognize other creatures crucial for their survival, either prey or threat, and we humans identify individual faces among thousands of nearly equal facial configurations, and recognize the emotive meaning of each one on the basis of minute muscular expressions. A space or a place is a kind of a diffusely felt multi-sensory image, an experiential 'creature', a singular experience, that is fused with our very existential

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<sup>18</sup> A. Aalto, *The trout and the mountain stream*, in *Alvar Aalto sketches*, ed. by G. Schildt, Cambridge, The MIT Press, 1985, p. 97.

experience and cognition. Once we have assessed a space inviting and pleasant, or uninviting and depressing, we can hardly alter that first-hand judgement. We become attached to certain settings and remain alienated in other kinds of settings, and both intuitive choices are equally difficult to analyse verbally or alter as experiential realities.

The existential value of the diffuse but comprehensive grasping of the ambience of a spatial entity, or an entire landscape, can be understood from the point of view of biological survival. It has evidently given an evolutionary advantage to be instantly able to differentiate a scene of potential danger from a setting of safety and nourishment. Let me repeat, such judgements cannot be consciously deducted from details; they have to be instantaneously grasped as an intuitive reading based on a 'polyphonic' grasp of the ambience. This polyphonic perception and cognition has been identified as one of the conditions for the creative mind. At this point, I wish to suggest that the elementarist idea of perception, imagery and thought is questionable, if not altogether wrong. An elementarist approach to conceiving architecture as an additive entity of definable and pre-conceived elements is equally misguided.

### **Unconscious perception and creative thought**

Against the common understanding, also creative search is based on vague, polyphonic and mostly unconscious ways of perception and thought instead of focused and unambiguous attention<sup>19</sup>. Also unconscious and unfocused creative scanning grasps complex entities and processes, without conscious understanding of any of the elements, much in the way that we grasp the entities of atmospheres.

I wish to underline the fact that we have unexpected synthesizing capacities that we are not usually aware of, and, besides, which we do not regard as areas of special intelligence or value.

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<sup>19</sup> J. Pallasmaa, *In praise of vagueness: diffuse perception and uncertain thought*, Austin, University of Texas Press, 2011 (to be published). In his seminal books *The psychoanalysis of artistic vision and hearing: an introduction to a theory of unconscious perception* (1953) and *The hidden order of art* (1970), Anton Ehrenzweig argues that in order to grasp the inarticulate, unconscious entity of artistic works, we must adopt the mental attitude of diffuse attention. He writes about the 'polyphonic' structure of profound artworks, that can be appreciated only through 'multi-dimensional attention'. Also P. Klee in *Thinking eye* (1964) uses the word 'polyphonic' in reference to the essence artistic structure. The perception of atmosphere calls for similar diffuse attention to this polyphonic phenomenon.

The biased focus on rational logic and its significance in human mental life is a major reason behind this unfortunate rejection. It is surprising, indeed, that more than a century after Sigmund Freud's revolutionary discoveries, the prevailing pedagogic philosophies and practices continue to grossly undervalue the entire universe of unconscious and embodied processes. Also architectural education continues to emphasise conscious intentionality along with focused imagery over the pre-reflective ground of architecture and its experience.

We have traditionally underestimated the roles and cognitive capacities of emotions in comparison with our conceptual, intellectual and verbal understanding. Yet, emotional reactions are often the most comprehensive and synthetic judgements that we can produce, although we are hardly able to identify the constituents of these assessments. When we fear or love something, there is not much scope or need for rationalization.

Mark Johnson assigns to emotions a crucial role in thinking: «There is no cognition without emotion, even though we are often unaware of the emotional aspects of our thinking»<sup>20</sup>. In his view, emotions are the source of primordial meaning: «Emotions are not second-rate cognitions; rather they are affective patterns of our encounter with our world, by which we take the meaning of things at a primordial level»<sup>21</sup>. He points out that «emotions are processes of organism-environment interaction»<sup>22</sup>, and he suggests further that situations are the locus of emotions, not minds or brains<sup>23</sup>. «Emotions are a fundamental part of human meaning», Johnson concludes<sup>24</sup>.

Besides, our accepted understanding of intelligence is grossly limited. Recent psychological studies have revealed seven to ten different categories of intelligence beyond the narrow realm of intelligence measured by the standard IQ test. The American psychologist Howard Gardner lists seven categories of intelligence: linguistic intelligence; logical-mathematical intelligence; musical intelligence; bodily-kinesthetic intelligence; spatial intelligence; interpersonal intelligence; intrapersonal intelligen-

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<sup>20</sup> M. Johnson, *op. cit.*, p. 9.

<sup>21</sup> *Ibid.*, p. 18.

<sup>22</sup> *Ibid.*, *op. cit.*, p. 66.

<sup>23</sup> *Ibid.*, *op. cit.*, p. 67.

<sup>24</sup> *Ibid.*



ce<sup>25</sup>. Later in his book, he suggests three further categories: naturalistic intelligence; spiritual intelligence; existential intelligence<sup>26</sup>. I would definitely add the categories of emotional, aesthetic and ethical intelligence in this list of human cognitive capacities, and I even suggest atmospheric intelligence as a specific realm of human intelligence. Atmospheric sensitivity and intelligence is crucial in all artistic work in order to sense the integrity of the work.

### **Atmospheric intelligence – a capacity of the right hemisphere**

Recent studies on the differentiation of the human brain hemispheres have established that, regardless of their essential interaction, the hemispheres have different functions; the left hemisphere is oriented towards the processing of detailed observation and information whereas the right hemisphere is dominantly engaged in peripheral experiences and the perception of entities. Besides, the right hemisphere is also oriented towards emotional processes while the left deals with concepts, abstractions and language.

It seems that the recognition of atmospheric entities takes place in a peripheral and subconscious manner primarily through the right hemisphere. In his challenging and thorough book on ‘the divided brain’, *Master and his emissary*, Iain McGilchrist assigns the task of peripheral perception and the integration of the multifarious aspects of experience to the right hemisphere:

The right hemisphere alone attends to the peripheral field of vision from which new experience tends to come; only the right hemisphere can direct attention to what comes to us from the edges of our awareness, *regardless of the side* [...]. So it is no surprise that phenomenologically it is the right hemisphere that is attuned to the apprehension of anything new.<sup>27</sup>

The right hemisphere, with its greater integration power, is constantly searching for patterns in things. In fact its understanding is based on complex pattern recognition<sup>28</sup>.

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<sup>25</sup> H. Gardner, *Intelligence reframed: multiple intelligences for the 21<sup>st</sup> century*, New York, Basic Books, 1999, pp. 41-43.

<sup>26</sup> *Ibid.*, p. 47.

<sup>27</sup> I. McGilchrist, *op. cit.*, p. 40.

<sup>28</sup> *Ibid.*, p. 47.

McGilchrist also locates contextual understanding, the recognition of configurational entities and emotional judgement in the right hemisphere: «Anything that requires indirect interpretation, which is not explicit or literal, that in other words requires contextual understanding, depends on the right frontal lobe for its meaning to be conveyed or received»<sup>29</sup>. «What the right hemisphere crucially appears to be able to do [here] is to see the ‘configurational’ aspects of the whole»<sup>30</sup>. «It is the right hemisphere which gives emotional *value* to what is seen»<sup>31</sup>.

### Space and imagination

Our innate capacity to grasp comprehensive atmospheres and moods is akin to our capacity of imaginatively projecting the emotively suggestive settings of an entire novel, as we read it. When reading a great novel, we keep constructing all the settings and situations of the story at the suggestion of the words of the author, and we move effortlessly and seamlessly from one setting to the next, as if they pre-existed as physical realities prior to our act of reading. Indeed, the settings seem to be there ready for us to enter, as we move from one scene of the text to the next. Remarkably, we do not experience these imaginary spaces as pictures, but in their full spatiality and atmosphere. The same fullness applies to our dreams; dreams are not pictures as they are spaces, or quasi-spaces, and imaginatively lived experiences. Yet, they are entirely products of our imagination. The sensory imagery evoked by literature seems to be a kind of an imaginative sensory atmosphere.

The processes of literary imagination are discussed in Elaine Scarry’s recent book *Dreaming by the book*. She explains the vividness of a profound literary text as follows:

In order to achieve the ‘vivacity’ of the material world, the verbal arts must somehow also imitate its ‘persistence’ and, most crucially, its quality of ‘givenness’. It seems almost certainly the case that it is the ‘instructional’ character of the verbal arts that fulfils this mimetic requirement for ‘givenness’.<sup>32</sup>

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<sup>29</sup> *Ibid.*, p. 49.

<sup>30</sup> *Ibid.*, p. 60.

<sup>31</sup> *Ibid.*, p. 62.

<sup>32</sup> E. Scarry, *Dreaming by the book*. Princeton, Princeton University Press, 2001, p. 30.

Bohumil Hrabal, the Czech writer, also points out the concreteness of our literary imagination: «When I read, I don't really read: I pop up a beautiful sentence in my mouth and suck it like liqueur until the thought dissolves in me like alcohol, infusing my brain and heart and coursing on through the veins to the root of each blood vessel»<sup>33</sup>.

Also architecture calls for a deepened sense of materiality, gravity and reality, not an air of entertainment or fantasy. The power of architecture is in its ability to strengthen the experience of the real, and even its imaginative dimension arises from this strengthened and re-sensitized sense of reality. As Constantin Brancusi requests, «Art must give suddenly, all at once, the shock of life, the sensation of breathing»<sup>34</sup>.

Experiencing, memorizing and imagining spatial settings, situations and events, all engage our imaginative skills; even the acts of experiencing and memorizing are embodied acts in which lived embodied imagery evokes an imaginative reality that feels like an actual experience. Recent studies have revealed that the acts of perception and imagining take place in the same areas of the brain and, consequently, these acts are closely related<sup>35</sup>. Even perception calls for imagination, as percepts, are not automatic products of our sensory mechanisms; perceptions are essentially creations and products of intentionality and imagination. We could not even see light without our mental 'inner light' and formative visual imagination, as Arthur Zajonc argues<sup>36</sup>.

Atmosphere or ambience is an epic experiential dimension or prediction, as we automatically read behavioural and social aspects – either existent, potential or imaginary – into the atmospheric image. We also read a temporal layering or narrative into the setting, and we appreciate emotionally the layering of temporal traces as well as images of past life in our settings. We evidently like to be connected to signs of life instead of being isolated in hermetic and artificial conditions. Don't we seek historically dense settings because they connect us experientially and imaginatively

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<sup>33</sup> B. Hrabal, *Too loud a solitude*, San Diego - New York - London, Harcourt Inc., 1990, p. 1.

<sup>34</sup> C. Brancusi, as quoted in E. Shanes, *Constantin Brancusi*, New York, Abbeville Press, 1989, p. 67.

<sup>35</sup> I. Kojo, *Mielikuvat ovat aivoille todellisia [Images are real for the brain]*. *Helsingin Sanomat*, Helsinki 16.3.1996. The article refers to the research at Harvard University by a group of researchers under the supervision of Stephen Rosslyn in the mid 1990s.

<sup>36</sup> See A. Zajonc, *Catching the light: the entwined history of light and mind*, New York - Oxford, Oxford University Press, 1995, p. 5.

with past life, and we feel safe and enriched to be part of that temporal continuum? Traces of life support images of safety and generate further images of continued life.

We do not judge environments merely by our senses; we also test and evaluate them through our sense of imagination. Comforting and inviting settings inspire our unconscious imagery, daydreams and fantasies. As Gaston Bachelard argues, «[T]he chief benefit of the house [is that] the house shelters daydreaming, the house protects the dreamer, the house allows one to dream in peace [...]. [T]he house is one of the greatest powers of integration for the thoughts, memories and dreams of mankind»<sup>37</sup>. Herbert Marcuse, the social psychologist, also acknowledges the connection between the atmospheres of settings and our fantasies as he makes the thought-provoking suggestion that the alarming increase of sexual violence and distorted sexuality today is a consequence of the fact that our modern settings do not stimulate and support erotic fantasy<sup>38</sup>. More often than not the atmosphere of contemporary cityscapes and dwellings lacks a sensuous and erotic air.

#### **'Understanding'. The artistic image**

We have been taught to conceive, observe and evaluate architectural spaces and settings primarily as formal and aesthetic entities. Yet, the diffuse overall ambience is often much more decisive and powerful in determining our attitude to the setting. Even buildings and details that hardly possess any aesthetic values manage to create a sensorially rich and pleasant atmosphere. Vernacular settings and traditional towns are examples of pleasant atmospheres often arising from aesthetically rather uninteresting units. Such urban atmospheres are most often created by specific materiality, scale, rhythm, colour or formal theme with variations. Materials, colour, rhythm and illumination are strongly atmospheric, probably because of their embodied, haptic and enveloping

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<sup>37</sup> G. Bachelard, *The poetics of space*, Boston, Beacon Press, 1969, p. 6.

<sup>38</sup> H. Marcuse, *The one-dimensional man: studies in the ideology of advanced industrial society*, Boston, Beacon Press, 1991, p. 73: «a whole dimension of human activity and passivity has been de-eroticized. The environment from which the individual could obtain pleasure – which he could cathect as gratifying almost as an extended zone of the body – has been rigidly reduced. Consequently the 'universe' of libidinous cathexis is likewise reduced. The effect is a localization and contraction of libido, the reduction of erotic to sexual experience and satisfaction».

nature. On the contrary, form and formal cohesion seem to have a closing and externalising impact instead of embracing us.

In architectural education we are usually advised to develop our designs from elementary aspects towards larger entities, but, as I have suggested, our perceptions and experiential judgements seem to advance in the reverse manner, from the entity down to details. When experiencing a work of art, the whole gives meaning to the parts, not the other way round. We need to grasp and conceive complete images instead of singular elements, and, in fact, there are no 'elements' in the world of artistic expression; there are only complete poetic images intertwined with distinct emotive orientations.

As I have already pointed out earlier, this view of the primacy of the whole is supported by current findings in the neurosciences: «According to the right hemisphere, understanding is derived from the whole, since it is only in the light of the whole that one can truly understand the nature of the parts», McGilchrist asserts<sup>39</sup>.

We are mentally and emotionally affected by works of art before we understand them; or, indeed, we usually do not 'understand' them at all. I would venture to argue that the greater the artistic work is, the less we understand it intellectually. A distinct mental shortcircuiting between the lived and emotive encounter and intellectual 'understanding' is a constitutive character of the artistic image. This is also the view of Semir Zeki, one of today's leading neurologists studying the neurological ground of artistic images and effects. He regards a high degree of ambiguity, such as the unfinished imagery of Michelangelo's slaves or the ambivalent human narratives of Vermeer's paintings, as essential contributors to the greatness of these works<sup>40</sup>. In reference to the great capacity of profound artists to evoke, manipulate and direct our emotions, Zeki makes the surprising argument: «Most painters are also neurologists [...]: they are those who have experimented upon and, without ever realising it, understood something about the organisation of the visual brain, though with the techniques that are unique to them»<sup>41</sup>.

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<sup>39</sup> I. McGilchrist, *op. cit.*, p. 142.

<sup>40</sup> S. Zeki, *Inner vision: an exploration of art and the brain*, Oxford, Oxford University Press, 1999, pp. 22-36.

<sup>41</sup> *Ibid.*, p. 2.

### Perspectival space and peripheral vision

The all-encompassing and instantaneous perception of atmospheres calls for a specific manner of perception – unconscious and unfocused peripheral perception. This fragmented perception of the world is actually our normal reality, although we believe that we perceive everything with precision. Our image of our world of perceptual fragments is held together by constant active scanning by the senses, movement and a creative fusion and interpretation of these inherently dissociated percepts through memory.

The historic development of the representational techniques depicting space and form is closely tied to the development of architecture itself. The perspectival understanding of space gave rise to an architecture of vision, whereas the quest to liberate the eye from its perspectival fixation enables the conception of multi-perspectival, simultaneous, and atmospheric space. Perspectival space leaves us as outside observers, whereas multi-perspectival and atmospheric space and peripheral vision enclose and enfold us in their embrace. This is the perceptual and psychological essence of Impressionist, Cubist, and Abstract Expressionist space; we are pulled into the space and made to experience it as a fully embodied sensation and a thick atmosphere. The special reality of a Cézanne landscape, Jackson Pollock painting, as well as of engaging architecture and cityscapes, derives from the way these experiential situations engage our perceptual and psychological mechanisms. As Merleau-Ponty argues, «we come to see not the work of art, but the world according to the work»<sup>42</sup>.

While the hectic eye of the camera captures a momentary situation, a passing condition of light, or an isolated, framed and focused fragment, the real experience of architectural reality depends fundamentally on peripheral and anticipated vision; the mere experience of interiority implies peripheral perception. The perceptual realm that we sense beyond the sphere of focused vision is as important as the focused image that can be frozen by the camera. In fact, there is evidence that peripheral and unconscious perception is more important for our perceptual and mental system than focused perception<sup>43</sup>.

<sup>42</sup> As quoted in I. McGilchrist, *op. cit.*, p. 409.

<sup>43</sup> Anton Ehrenzweig offers the medical case of *hemianopia* as a proof for the priority of peripheral vision in the psychic condition of our mechanism of sight. In a case of this rare illness, one half of the visual field turns blind while the other retains vision. In some cases of the illness, the field of vision later reorganizes itself into a new complete circular field of vision with a new focus of sharp vision in the centre and an unfocused

This assumption suggests that one reason why contemporary spaces often alienate us – compared with historical and natural settings, that elicit powerful emotional engagement – has to do with the poverty of our peripheral vision, and the consequent weakness of the atmospheric quality. Focused vision makes us mere outside observers; whereas peripheral perception transforms retinal images into a spatial and bodily involvement and gives rise to the sense of an engaging atmosphere and personal participation. Peripheral perception is the perceptive mode through which we grasp atmospheres. The importance of the senses of hearing, smell, and touch (temperature, moisture, air movement) for the atmospheric perception arises from their essence as non-directional and embracing experiences. The role of peripheral and unconscious perception explains why a photographic image is usually an unreliable witness of true architectural quality; what is outside of the focused frame, and even behind the observer, has as much significance as what is consciously viewed. Indeed, architects would do better if they were less concerned with the photogenic qualities of their works. As neurological understanding suggests, meaning is always contextually grounded.

Today's urgent call for an ecologically sustainable architecture also suggests a non-autonomous, fragile, and collaborative architecture adapted to the precise conditions of topography, soil, climate, vegetation, as well as other conditions of the region and site. The potentials of atmosphere, weak gestalt and adaptive fragility will undoubtedly be explored in the near future in the search of an architecture that will acknowledge the conditions and principles of the ecological reality as well as of our own bio-historical nature.

I suggest that we may well become more interested in atmospheres than in individually expressive forms. Understanding atmospheres will most likely teach us about the secret power of architecture and how it can influence entire societies, but, at the same time, enable us to define our own individual existential foothold.

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field around. As the new focus is formed, the reorganization implies that parts of the former peripheral field of inaccurate vision acquire visual acuity, and, even more significantly, the area of former focused vision gives up its capacity for sharp vision as it transforms into a part of the new unfocused peripheral field. «These case histories prove, if proof is needed, that an overwhelming psychological need exists that requires us to have the larger part of the visual field in a vague medley of images», Ehrenzweig notes in *The hidden order of art* cit, p. 284.

Our capacity to grasp qualitative atmospheric entities of complex environmental situations, without a detailed recording and evaluation of their parts and ingredients, could well be named our sixth sense, and it is likely to be our most important sense in terms of our existence, survival and emotional lives.

We are not sure, and could never be sure, if mind, or even body, is a thing at all. Mind has the characteristics of a process more than a thing; a becoming, a way of being, more than an entity. Every individual mind is a process of interaction with whatever it is that exists apart from ourselves according to its own private history.<sup>44</sup>

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<sup>44</sup> I. McGilchrist, *op. cit.*, p. 20.